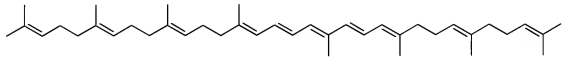
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all listing and versions of claims in this application.

Listing of Claims:

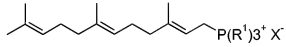
1. (Original) A process for preparing phytofluene of the formula I,



I

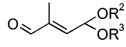
which comprises

a) condensing a phosphonium salt of the formula II,



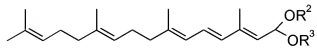
II

in which R^1 is aryl and X^- is the anion equivalent of an inorganic or organic acid, with an aldehyde of the formula III



III

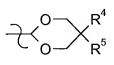
in a Wittig reaction to give an acetal of the formula IV



IV

where the substituents R^2 and R^3 are independently of one another C_1-C_8-alkyl, or together with the oxygen atom and the carbon atom to which they are bonded may form a

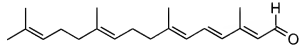
1,3–dioxolane or 1,3–dioxane ring of the following structures



,

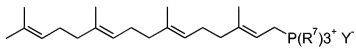

in which R^4 and R^5, and R^6 may each independently of one another be hydrogen or C_1–C_4–alkyl,

b) subjecting the condensation product of the formula IV to an acid-catalyzed acetal hydrolysis to give the aldehyde of the formula V



V

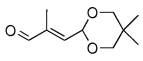
c) and condensing V in a further Wittig reaction with a phosphonium salt of the formula VI,



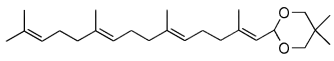
VI

in which R^7 is aryl and Y^- is the anion equivalent of an inorganic or organic acid, to give phytofluene.

2. (Original) The process according to claim 1, wherein in step a) the phosphonium salt of the formula II is reacted with the aldehyde of the formula IIIa to give the acetal of the formula IVa.



IIIa



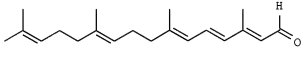
IVa

3. (Currently Amended) The process according to ~~either of claims 1 or 2~~ claim 1, wherein X^- and Y^- of the phosphonium salts II and VI are independently of one another the anion equivalent of an acid selected from the group consisting of hydrohalic acid, sulfuric acid, phosphoric acid, formic acid, acetic acid and sulfonic acid.

4. (Original) The process according to claim 3, wherein X^- and Y^- are Cl^-, Br^-, $C_nH_{2n+1}–SO_3^-$ with n = 1–4, $Ph–SO_3^-$, $p–Tol–SO_3^-$ or $CF_3–SO_3^-$.

5. (Currently Amended) The process according to ~~any of claims 1 to 4~~ claim 1, wherein the hydrolysis of the acetal IV in step b) is carried out in the presence of citric acid as acidic catalyst.

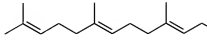
6. (Original) A process for preparing the C_{20} aldehyde of the formula V,



V

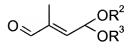
which comprises

a) condensing a phosphonium salt of the formula II,



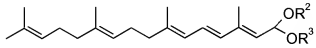
II

in which R^1 is aryl and X^- is the anion equivalent of an inorganic or organic acid, with an aldehyde of the formula III



III

in a Wittig reaction to give an acetal of the formula IV



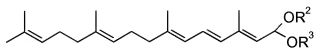
IV

where the substituents R^2 and R^3 are independently of one another C_1-C_8-alkyl, or may form together with the oxygen atoms and the carbon atom to which they are bonded a 1,3–dioxolane or 1,3–dioxane ring of the following structures

in which R^4 and R^5, and R^6 may each independently of one another be hydrogen or C_1–C_4–alkyl,

b) subjecting the condensation product of the formula IV to an acid-catalyzed acetal hydrolysis to give the aldehyde of the formula V.

7. (Original) Acetals of the general formula IV

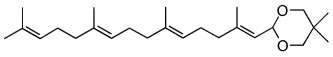


IV

in which the substituents R^2 and R^3 are independently of one another C_1-C_8-alkyl or may form together with the oxygen atoms and the carbon atom to which they are bonded a 1,3-dioxolane or 1,3-dioxane ring of the following structures

in which R^4 and R^5, and R^6 may each independently of one another be hydrogen or C_1–C_4–alkyl.

8. (Original) The acetal of the formula IVa



IVa